Agency EMS Metrics – A Peek at 2009 and Beyond

Mike Green (NASA)

Steve Woodbury (DOE) for the

Metrics Workgroup of the

Interagency Environmental Leadership Workgroup

Federal Environmental Symposium East & West

June 3, 2008 June 19, 2008

Overview of Metrics Subgroup Activities

- EMS Metrics 2006-2008
- New Metrics for 2009 and Beyond
  - Review and revise previous EMS metrics elements
  - Propose new EMS metrics elements for 2009 and beyond
- New data collection questions
- The EMS Reporting Process
- Agency Scores and OMB Scorecard

Overview of Metrics Subgroup Activities

- EMS metrics 2006-2008
- The EMS reporting process
- New scorecard metrics for 2009 and beyond
  - Review and revise previous EMS metrics elements
  - Propose new EMS metrics elements for 2009 and beyond
- New data collection questions

EMS Metrics – 2006-2008

- Assume Initial EMS Implementation
- Developed by metrics subgroup, starting 2004
- Intended to:
  - Be clearly and fully defined
  - Be tough but attainable
    - Must pass OMB scrutiny
    - No “cream puff” metrics
  - Give facilities feedback on how they are doing
  - Provide agencies overall feedback
  - Provide data on value/benefit of the EMS
  - Support continual improvement

Challenges

- Define the metric
- Establish a performance level
- Make clear what the data represents (not a scaled response)
  - Not every ‘C’ is equal, but establishes a performance level for the particular metric area
  - In all cases, ‘D’ is the preferred response
- Establish metrics applicable across the Federal government, considering not all departments are of equal size or have the same number of facilities

Metrics Elements

- Focus on individual EMS (facility-level or organization-level), not on Agency
- Seven EMS Elements
  - Environmental Aspects
  - Goals, Objectives And Targets
  - Operational Controls
  - Environmental Training
  - Contracts
  - EMS Audit/Evaluation Procedures
  - Management Review

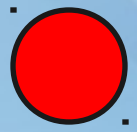
Additional Information Questions 2005-2008

- Impact of EMS on your organization
- Impact of EMS on the environment
- Open-ended questions
  - Best practices
  - Lesson-learned
  - Challenges

Understanding The Color Rating

Green: All elements of the EMS are in place and working

Yellow: Most elements are in place, but one or two areas need focused attention



Red: Two or more elements are not functioning or may not be present

Facility Metrics Roll Up to Department Metric

- EMS metrics are addressed at the level of the individual EMS (facility or organization-level)
- Responses roll up to a green/yellow/red score for each EMS
- These scores then roll up to give a green/yellow/red score at the Department level

EMS Reporting Process

- Annual Agency EMS Report is due to EPA in December for previous fiscal year
  - Provides summary data (not facility-specific)
  - Data are used
    - OMB Scorecard
    - Biennial report to the President (data and narratives)
- Site reporting options:
  - Facilities enter data electronically into FedCenter site for Agencies to ‘roll up’ for Agency report to EPA

    OR
  - Agencies collect and tabulate data on their own

EMS Status in OMB Scorecard

- OMB issues scorecards semi-annually to each Agency in these areas:
  - Environmental Sustainability
  - Energy
  - Transportation
- EMS is currently one of five elements in the ‘Environmental Sustainability’ scorecard

Developing EMS Metrics for 2009 and Beyond

- OMB Scorecard Metrics
  - Review and revise previous EMS metrics elements
  - Propose new EMS metrics elements for 2009 and beyond
- Propose new data collection questions

Revise and Retain 7 Previous EMS Metrics Elements

- Environmental Aspects
  - minor changes
- Goals, Objectives and Targets
  - minor changes
- Operational Controls
  - minor changes
- Environmental Training
  - minor changes
- Contracts
  - revised to reflect new wording in CEQ *Instructions*
- EMS Audit/Evaluation Procedures
  - replaced
- Management Review
  - minor changes
    - annual senior leadership review
    - reflect ISO 14001:2004

Proposed New EMS Metrics for 2009 and Beyond

New metrics address three new requirements in EO 13423

- Managing compliance
- Integrating sustainable practices into EMS (including energy, water, fleet)
- Conducting external audit, and declaring EMS to be “fully implemented”

The Metrics Subgroup will also propose an updated protocol for aggregating individual responses into red/yellow/green score for the Agency as a whole, for the OMB scorecard

Proposed New EMS Metrics

- Each metric has statements ranging from
  - A (least implemented) to
  - D (fully implemented)
- The following slides
  - Identify the new requirements
  - List the ‘D’ or ‘best response’ criterion from the proposed metric

Managing Compliance – New Requirements

- E.O. 13423 requires each agency to establish a program for environmental compliance review and audit *[§ 3.(c)]*
- The CEQ *Instructions* establish that the EMS shall be used to support compliance with environmental and energy regulations *[§ II.A.(1)]*
- ISO 14001:2004 established a new element for “Evaluation of Compliance” *[¶ 4.5.2]*

Managing Compliance – Proposed New Metric

Best Response:

Facility/organization has established and implemented an environmental compliance program … AND

Facility/organization has identified applicable legal and other requirements … AND

The facility/organization has completed evaluations of compliance with applicable legal and other requirements for the entire facility/organization, in accordance with the established frequency. AND

Corrective actions have been initiated or have been scheduled …

Sustainable Practices in EMS – New Requirements

- E.O. 13423 requires that EMSs shall address the environmental aspects of agency transportation and energy functions.
- The agency shall implement sustainable practices for
  - Improvement in energy efficiency and reduction in greenhouse gas emissions,
  - Use of renewable energy
  - Reduction in water consumption
  - Sustainable acquisition
  - Reduction of the use and disposal of toxic and hazardous chemicals and materials
  - Waste prevention and recycling programs
  - High performance and sustainable buildings
  - Vehicle fleet management
  - Electronics stewardship.

Sustainable Practices in EMS – Proposed New Metric

Best Response:

Facility/organization has established and implemented requirements/ procedures to address all applicable sustainable practices as required by Executive Order 13423 through the facility/organization's EMS, including setting objectives and targets as appropriate, monitoring, training, and management review;

AND

Facility/organization has reviewed performance of these sustainable practices through their monitoring and management review process.

New Requirements for 'Fully Implemented' EMS

Proposed metric addresses the requirements in the CEQ *Instructions* for what constitutes a 'fully implemented' EMS under EO 13423 *[§ II.C.(1)]*

1. Formal outside EMS audit conducted within 3 years
2. Audit findings recognized by appropriate management
3. Declaration of conformance issued by appropriate senior manager

Proposed Metric for 'Fully Implemented' EMS

- **Not Currently in Conformance**

  The EMS … has not been declared "fully implemented" in accordance with the requirements of the CEQ Implementing Instructions

  OR

  The EMS has been declared "fully implemented"… BUT The date of initial conformance declaration was more than three years ago, and the EMS has not had been audited within the past three years by a qualified party outside the control or scope of the EMS

Proposed Metric for 'Fully Implemented' EMS (cont.)

- **Currently In Conformance**

  The EMS is "fully implemented" in accordance with the requirements of the CEQ Implementing Instructions

  AND

  If the date of initial conformance declaration was more than three years ago, then the EMS has been audited within the past three years by a qualified party outside the control or scope of the EMS, and the conformance declaration has been renewed as appropriate based on agency guidance.

Reporting the ‘Fully Implemented’ EMS Metric

- This metric is different from the others, and the Metrics Subgroup has recommended that it be tabulated and scored separately

Additional Information Collection 2009 and Beyond

The Metrics Subgroup proposes new information questions (non-scorecard) to address integration of 10-12 specific environmental aspects into the EMS

- Does this aspect exist at your facility/organization?
- Is this aspect included in your list of ‘significant aspects’?
- Have you established objectives and targets for this aspect?
- Are these objectives and targets included in your EMS?
- Have you implemented plans / programs to address this aspect?
- Are these plans and programs included in your EMS?

Information Questions from Previous Years

- New questions on integration of sustainable practices into EMS reflect the thrust of EO 13423
- For 2006-2008, the information questions addressed
  - Impact of EMS on environmental performance
  - Impact of EMS on the organization
- The Interagency workgroup is reviewing whether the new questions should replace or supplement the previous questions

Narrative Questions

The Metrics Subgroup recommends retaining the open-ended narrative questions addressing

- EMS benefits/successes
- EMS best practices
- EMS lessons learned
- EMS challenges
- EMS benefits to agency mission

In Conclusion

EMS metrics

- continue to evolve to reflect new requirement
- are intended to measure progress, but also to support implementation of key elements
- are developed by a participatory inter-agency process
- are reflected in OMB scorecards to Agencies

Go Green! – Score Green!

For More Information:

Mike Green
National Aeronautics and Space Administration
202-358-1097
michael.j.green-1@nasa.gov

Steven Woodbury
Department of Energy
202-586-4371
steven.woodbury@hq.doe.gov

Backup Slides

Metrics Subgroup Members

Subgroup Members:

- TJ Granito, USCG/DHS
- Mike Green, NASA
- Eric Haukdal, DOE (previously HSS)
- Marc Hewett, DOD
- John Lewis, USDA/USFS
- Ed Pfister, HHS
- Russelle McCollough, EPA
- Karen Waldvogel, USDA
- Pete Wixted, DOC
- James Wozniak, DLA
- Steven Woodbury, DOE

With the support of:

- Ed Pinero, OFEE (previously)
- Will Garvey, USEPA

Managing Compliance – Proposed New Metric

A. Facility/organization has not established procedures for an environmental compliance program through the facility/organization's EMS as required by Executive Order 13423.

B. Facility/organization has:

- 1. Established an environmental compliance program as part of the facility/organization's EMS that includes

  (a) procedures to identify and account for applicable legal and other requirements,

  (b) protocols to periodically evaluate compliance with those applicable legal and other requirements, including the frequency of compliance evaluations, and

  (c) a system for implementing corrective action. AND
- 2. Identified applicable legal and other requirements. BUT
- 3. Has not implemented the protocols to evaluate compliance, or the system to implement corrective actions.

Managing Compliance – Proposed New Metric (cont.)

C. Facility/organization has established an environmental compliance program as described in B.1. above. AND

Facility/organization has identified applicable legal and other requirements, as described in B.2. above. AND

The facility/organization has conducted evaluations of compliance with applicable legal and other requirements. BUT

The facility/organization has not completed the evaluations for all of the facility/organization in accordance with the established frequency, or has not initiated corrective actions for completed evaluations.

D. Facility/organization has established and implemented an environmental compliance program as described in B.1. above. AND

Facility/organization has identified applicable legal and other requirements, as described in B.2. above. AND

The facility/organization has completed evaluations of compliance with applicable legal and other requirements for the entire facility/organization, in accordance with the established frequency. AND

Corrective actions have been initiated or have been scheduled (as appropriate, considering technical and budgetary constraints).

Sustainable Practices – Proposed New Metric

A. Facility/organization has not established requirements/procedures to address applicable sustainable practices as required by Executive Order 13423 through the facility/organization's EMS.

B. Facility/organization has established requirements/procedures to address applicable sustainable practices as required by Executive Order 13423 through the facility/organization's EMS, including procedures for setting objectives and targets as appropriate, monitoring, training, and management review, but has not implemented the requirements/procedures.

Sustainable Practices – Proposed New Metric (cont.)

C. Facility/organization has established and implemented requirements/procedures to address applicable sustainable practices as required by Executive Order 13423 through the facility/organization's EMS, including setting objectives and targets as appropriate, monitoring, training, and management review. AND

The facility/organization has incorporated at least one of the applicable sustainable practices through the EMS. AND

The facility/organization has established an implementation schedule to complete incorporation of the remainder of the applicable sustainable practices through the EMS.

D. Facility/organization has established and implemented requirements/ procedures to address all applicable sustainable practices as required by Executive Order 13423 through the facility/organization's EMS, including setting objectives and targets as appropriate, monitoring, training, and management review. AND

Facility/organization has reviewed performance of these sustainable practices through their monitoring and management review process.

Facility-Level Rating
(Constant from 2006-2008)

For Green, a Facility Needs:

At Least 5 D's
No More than 1 B
No A's at all

←OR→

At Least 4 D's
No B's at all
No A's at all

For Yellow, a Facility Needs:

At Least 4 C's (or D's)
No More than 1 A

For Red, a Facility is:

Neither Green nor Yellow

Department Level Scoring
(More Stringent Each Year, 2006-2008)

2006

G	At Least **70%** of Facilities are Green No More than 5% of Facilities are Red
Y	No More than **20%** of Facilities are Red
R	Neither Green nor Yellow

2007

G	At Least **75%** of Facilities are Green No More than 5% of Facilities are Red
Y	No More than **15%** of Facilities are Red
R	Neither Green nor Yellow

2008

G	At Least **80%** of Facilities are Green No More than 5% of Facilities are Red
Y	No More than **10%** of Facilities are Red
R	Neither Green nor Yellow

Possible Scoring Combinations (2006-2008)

D	C	B	A	Rating
7				Green
6	1			Green
6		1		Green
5	2			Green
5	1	1		Green
4	3			Green
6			1	Yellow
5	1		1	Yellow
5		2		Yellow
5		1	1	Yellow
4	2	1		Yellow
4	2		1	Yellow
4	1	2		Yellow
4	1	1	1	Yellow
4		3		Yellow
4		2	1	Yellow
3	4			Yellow
3	3	1		Yellow
3	3		1	Yellow
3	2	2		Yellow
3	2	1	1	Yellow
3	1	3		Yellow
3	1	2	1	Yellow
2	5			Yellow
2	4	1		Yellow
2	4		1	Yellow
2	3	2		Yellow
2	3	1	1	Yellow
2	2	3		Yellow
2	2	2	1	Yellow
1	6			Yellow
1	5	1		Yellow
1	5		1	Yellow
1	4	2		Yellow
1	4	1	1	Yellow
1	3	3		Yellow
1	3	2	1	Yellow
	7			Yellow
	6	1		Yellow
	6		1	Yellow

D	C	B	A	Rating
1	1	3	2	Red
1	1	2	3	Red
1	1	1	4	Red
1	1		5	Red
1		6		Red
1		5	1	Red
1		4	2	Red
1		3	3	Red
1		2	4	Red
1		1	5	Red
1			6	Red
	5		2	Red
	4	1	2	Red
		6	1	Red
		5	2	Red
		4	3	Red
		3	4	Red
		2	5	Red
		1	6	Red
			7	Red

D	C	B	A	Rating
	5	2		Yellow
	5	1	1	Yellow
	4	3		Yellow
	4	2	1	Yellow
5			2	Red
4	1		2	Red
4		1	2	Red
4			3	Red
3	2		2	Red
3	1	1	2	Red
3	1		3	Red
3		4		Red
3		3	1	Red
			2	Red
			3	Red
			4	Red
			2	Red
			2	Red
			3	Red
				Red
				Red
			2	Red
			3	Red
			4	Red
				Red
			1	Red
			2	Red
			3	Red
			4	Red
			5	Red
			2	Red
			2	Red
			3	Red
1	2	4		Red
1	2	3	1	Red
1	2	2	2	Red
1	2	1	3	Red
1	2		4	Red
1	1	5		Red
1	1	4	1	Red

Color Tally:	
Green	6
Yellow	38
Red	76
Total:	120